UTAH DEPARTMENT OF HEALTH, BUREAU OF EMS
UTAH TRAUMA SYSTEM
PREHOSPITAL TRAUMA TRANSPORT PROTOCOL
TEACHING GUIDELINES

Purpose

The purpose of the PREHOSPITAL TRAUMA TRANSPORT PROTOCOL is to ensure that patient with time critical injuries are transported to a designated Level I, II Trauma Center, or the nearest appropriate hospital facility for initial stabilization and treatment. This protocol has been developed by the Protocol Education and Prevention sub-committee (PEP), endorsed by the Trauma System Advisory Committee (TSAC), and in accordance with Rule R426-5-1 adopted by the Department of Health (DOH).

The procedure is described in the schematic with narrative. Its purpose is to provide the prehospital provider with quick identification of a major trauma patient. If the victim is a major trauma patient, that patient or patients must be taken to the nearest designated Level I or II Trauma Center. If a Level I or II designated Trauma Center is not available within 30 minutes by ground or air; the patient or patients should be transported to the closest appropriate facility to stabilize the patient. To determine whether an injury is major trauma, the prehospital provider should conduct the patient assessment process according to the trauma transport protocol.

Explanation of Process

A. **Any certified EMS responder or trained trauma personnel can identify a major trauma patient and activate the trauma system.** This may include requesting more advanced prehospital services or aero-medical evacuation.

B. **The first step (Step One) is to assess vital signs & level of consciousness.** "Altered Mental Status" includes anyone with an altered neurological exam ranging from complete level of consciousness, to someone who responds to painful stimuli only, or a verbal response which is confused, or an abnormal motor response.

Conditions in Step One mean that any one of the entities listed in Step One can activate the trauma system.

The asterisk (*) means that if the airway is not secure and the on-scene personnel cannot effectively manage the airway, the patient should be taken to the nearest medical facility capable of immediate definitive airway management or consider meeting up with an ALS unit. These factors are true regardless of the assessment of other vital signs and level of consciousness.

The blue box found at the lower right hand corner shows normal pediatric vital signs. Pediatric vital sign normals can be used on those children 15 years of age or less. Remember that children at the age of 15 or approximately 50 kilograms are given pediatric dosages of medications when indicated.

C. **The second step (STEP TWO) is to assess the anatomy of injury.** The specific injuries noted require activation of the trauma system. Even in the assessment of normal vital signs or normal level of consciousness, the presence of any of the specific anatomical injuries does require activation of the trauma system.

Please note that steps one and two also require notifying Medical Control

D. **The third step (STEP THREE) for the prehospital provider is to assess the biomechanics of the injury and address other risk factors.** The conditions identified are reasons for the provider to contact and **consult with Medical Control** regarding the need to activate the system. They **do not** automatically require system activation by the prehospital provider.

Other risk factors coupled with a "gut feeling" of severe injury means that Medical Control should be consulted. Consideration should be given to transporting the patient to the nearest facility that has the resources necessary for treatment of those injuries.

Please note that burn patients (in addition to those listed in Step Two) should be considered for immediate transport or referral to a burn center.

E. Designation Definitions

The EMS provider must have a general understanding of the resources available in their geographical service area. The following are the

Level I Trauma Center – provides the most comprehensive care for the severely injured patient with complex multi-system trauma. Level I Trauma Centers are also responsible for research, resident training, community and outreach education, injury prevention and must be a resource for continuous quality improvement.

Level II Trauma Center – provides comprehensive care for the severely injured patient with complex multi-system trauma. Regional trauma care facilities are also responsible for community and outreach education, injury prevention and must be a resource for continuous quality improvement.

Level III Trauma Center – provides initial evaluation and stabilization of the severely injured patient including surgical intervention and intensive care capabilities. Inpatient services are provided to patients who can be maintained in a stable or improving condition without specialized care. Those patients needing specialized care are transferred to a Level I or II Trauma Center. The Level III Trauma Center also provides community and outreach education and should be involved in injury prevention programs.

Level IV Trauma Center – provides initial evaluation and stabilization of the severely injured patient. Stabilization may include surgical intervention, however most patients needing surgical intervention and or specialty care are transferred to a Level I or II Trauma Center. Level IV Trauma Centers have the necessary equipment and diagnostic resources to resuscitate the severely injured patient. Level IV Trauma Centers also provide continuing education programs for nurses, allied health and EMS providers and should be involved in injury prevention initiatives.

Level V Trauma Center – is generally a licensed, small rural facility with a commitment to the resuscitation of the trauma patient and written transfer protocols in place to assure those patients that require a higher level of care are appropriately transferred. They may or may not be staffed with a physician but rather a licensed mid-level practitioner (i.e. nurse practitioner or physician's assistant). This categorization does not contemplate the availability of surgeons, operating rooms nor intensive care units.

Patient Care Procedures

To the right of the schematic you will find the words "TRANSPORT THE PATIENT TO A DESIGNATED LEVEL I OR II TRAUMA CENTER[1]". It should be remembered that if a Level I or II designated Trauma Center is not available within 30 minutes by ground or air, the trauma patient should be transported to the closest appropriate facility to stabilize the patient. Many regions within Utah do not have a designated Trauma Center. Out of state transport to a designated Trauma Center that is capable of providing immediate definitive care is appropriate and encouraged.

These protocols are intended to further define how the trauma system is to operate. These protocols identify the level of medical care personnel who participate in the trauma system, their roles in the system, and participation of hospital facilities within the system. The Prehospital Trauma Transport Protocols address the issue of delivering the trauma patient to the facility that can provide definitive care in a timely manner.

In summary, the Prehospital Trauma Transport Protocol and the Hospital Trauma Transfer Protocol are intended to work *together* to effectively address the needs of the trauma patient. By functioning in this manner, these two instruments can effectively reduce morbidity and mortality.

If you have any questions on the use of either instrument, you should bring them to the attention of your local EMS Regional Consultant or your Trauma System Coordinator, Karen L. Mickelson RN BSN, EMT by contacting 1-801-538-9483 or kmickelson@utah.gov.